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| 09/975,690      | 10/11/2001  | William W. Lee       | NY-THEOR 203.1-US   | 2373             |

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EXAMINER

KIANERSI, MITRA

| ART UNIT | PAPER NUMBER |
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2143

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/975,690

Applicant(s)

LEE ET AL.

Examiner

mitra kianersi

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

*Claims 1-18 have been examined.*

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anne Thomas (Patricia Seybold Group, December 1998), and further in view of Underwood (US Patent No. 6601233).

1. As per claim 1, Thomas discloses a method of generating code for Enterprise JavaBeans (EJB) components from a business process (Enterprise JavaBeans, page 1, [1]). transforming each of said EJB components into EJB source code. (simpler and better code, page 5, [5]). Although, Thomas does not explicitly disclose the steps of: graphically modeling business process using a UML drawing tool to provide an UML model having a plurality of EJB Classes, defining relationships between said plurality of EJB classes; and stereotyping each of said plurality of EJB classes into one or more EJB components. However, Underwood teach a method where in the industry standard representing the object model in UML notation and (Rational Rose 98). Also see (Configure Java Runtime components, Underwood). Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)
2. As per claim 2, Thomas does not teach comprising the step of compiling said EJB source code to generate EJB application in accordance with deployment properties. However, Underwood teach that In deployment 14542, the Partitioned Business Components are

packaged and deployed as part of the application into the production environment. The application parameters and the manner in which the Partitioned Business Components are distributed are tweaked based on how well the application performs. Col 315, lines 5-10, Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)

3. As to claim 3, Thomas teach the invention substantially as claimed further comprising the step of deploying said EJB application to a server using one of the following: bean managed persistence or container managed persistence. (corresponds to EJB Architecture and Java bean container EJB container, page 3, [2, 3] container-managed persistence, Thomas)

4. As to claim 4, Thomas teach the invention substantially as claimed wherein the step of stereotyping stereotypes an EJB class into at least one of the following EJB component: Belonging, Session, Entity, Configurable Entity, Business Policy and Workflow (corresponds to transient and persistent objects and session beans, page 5, [6, 7], Thomas)

5. As to claim 5, Thomas teach the invention substantially as claimed wherein an Entity EJB component comprises at least one interface and two EJB classes. (corresponds to an EJB home interface used by the client to create, find or destroy the object, page 3, [3], Thomas)

6. As to claim 6, Thomas teach the invention substantially as claimed wherein said Entity EJB component being associated with a Primary Key class and a Value class. (Corresponds to Entity Beans, page 6, [1], Thomas)

7. As to claim 7, Thomas teach the invention substantially as claimed wherein each EJB component includes at least one of the following: name, stereotype, attribute and method. (corresponds to enabling reusability, page 5, [4], Thomas)

8. As to claim 8, Thomas teach the invention substantially as claimed wherein each attribute includes a pair of accessor methods. (corresponds to EJB object interface used by the client to access the business method within the object. Page 3, [3], Thomas)

9. As to claim 9, Thomas teach the invention substantially as claimed wherein said relationships include at least one of the following: inheritance and aggregation. (corresponds to extending a preexisting object class for new functionality (inheritance) and simple containment of another object (aggregation), page 7, [3], Thomas)

10. As to claim 10, Thomas teach the invention substantially as claimed wherein said aggregation includes multiplicity. (corresponds to when an object could point to hundreds of other objects, page 7, [3], Thomas)

11. As to claim 11, Thomas teach the invention substantially as claimed further comprising the steps of: determining if said multiplicity relationship is one to many; and stereotyping said aggregation relationship. (corresponds to object relationships, page 7, [3], Thomas)

12. As per claim 12, Thomas does not teach the collection type includes one of the following: Set, Array, List or Map. However, Underwood in Col 27, lines 44-50 disclose that it is better to use a variant array instead of collection to pass information around. It is more robust and performs better. Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)

13. As per claim 13, Thomas does not wherein each EJB component is a Smart Component having at least one Smart Feature. However Underwood, in col 323, lines 28-44, discloses (Robert Orfali, Dan Harkey, and Jeri Edwards also wrote the book The Essential Distributed Objects Survival Guide (1996). Chapter 2, "From Distributed Objects to "Smart Component," is an excellent source of information about objects,

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components, and the differences between them. Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)

14. As per claim 14, Thomas does not teach Smart Feature includes one of the following: SmartKey, SmartHandle and SmartValue. However, Underwood in Col 175, lines 64-67 discloses Java's method of choice for handling error conditions is exception handling. Exception handling allows one to keep the sequential flow of the functional code separate from the error handling. This leads to less complex code. Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)

15. As per claim 15, Thomas does not wherein said Smart component is an eBusiness Smart Component. However, Underwood in col 311, lines 65-67 teach that the code modules are subsequently deployed in an e-commerce environment in operation. Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)

16. As per claim 16, Thomas does not wherein the step of transforming includes the step generating said EJB codes according to a Code Template Dictionary. However, Underwood in col 217, lines 12-15 disclose a Project Configuration Management Plan templates for each platform have been created, and sample Project Configuration Management Plans are also available. Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)

17. As per claim 17, Thomas does not wherein said Code Template Dictionary includes key-value pair entries. However, Underwood in Col 110, lines 54-56, teach to encrypt the contents of the message through the use of a public key/private key pair. Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)


18. As per claim 18, Thomas does not wherein values of said Code Template Dictionary represent EJB code templates. However, Underwood in Col 317, lines 42-49, teach a JavaBeans that encapsulates a reusable concept like address or monetary value, a complex user interface control that allows users to edit a list of order lines, a group of objects responsible for persistence, a JavaBeans that sorts a collection of objects, and a list box coded as an ActiveX control. Therefore, it is obvious to one of ordinary skill in the art to incorporate Thomas's teaching of Enterprise JavaBeans Persistence Mechanism with Underwood's teaching of Business Components Framework to improved integration, interoperability, and scalability, col 314, lines 9-10)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Mitra Kianersi  
April/16/2004

  
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